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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,654	11/14/2000	Ramesh Gupta	ECB-0010	4644
75	90 03/04/2002	•		
Estelle C Bakun			EXAMINER	
ExxonMobil Research and Engineering Company P O Box 900			RIDLEY, BASIA ANNA	
Clinton Township Annandale, NJ 08801-0900			ARTINUT	D. 1000 1111 1000
			ART UNIT	PAPER NUMBER
			1764	10
,		DATE MAILED: 03/04/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application N .	Applicant(s)				
)	09/712,654	GUPTA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Basia Ridley	1764				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be a within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS fro , cause the application to become ABANDON	timely filed  ays will be considered timely.  m the mailing date of this communication.  IED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 05 (	October 2001 .					
2a) This action is <b>FINAL</b> . 2b) ☐ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>9-13</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 9-13 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o Application Papers	r election requirement.					
9)⊠ The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accept		aminer.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120	•					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the prior</li> <li>application from the International But</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).	-				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a)    The translation of the foreign language pro</li> <li>15) Acknowledgment is made of a claim for domesting</li> </ul>	• •					
Attachment(s)	- Filerity and 00 0.0.0. 33 12					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ary (PTO-413) Paper No(s)  Il Patent Application (PTO-152)				

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#### **DETAILED ACTION**

## Response to Amendment

The amendment filed on 5 October 2001 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

a section of paragraph inserted at page 6 line 8 which reads "In operation, the first elongated hollow member receives a portion of the feedstock (...) into the catalyst bed 5." While the original specification describes in general terms that fraction of the feedstock flow is bypassed through the bypass apparatus (see page 8 lines 7-9) it does not provide detailed description of how said bypass apparatus operates.

Applicant is required to cancel the new matter in the reply to this Office Action.

### Claim Rejections - 35 USC § 112

- The following is a quotation of the first paragraph of 35 U.S.C. 112: 2.
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- Claim(s) 13 is/are rejected under 35 U.S.C. 112, first paragraph, as containing subject 3. matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim(s) 13 recite(s) the limitation(s) "through said bypass tube into said cage and out from said cage through said perforations into said bottom layer of said fixed bed.". While the original specification describes in general terms that fraction

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of the feedstock flow is bypassed through the bypass apparatus (see page 8 lines 7-9) it does not provide detailed description of how said bypass apparatus operates.

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4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim(s) 12-13 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant(s) regard(s) as the invention.

Claim(s) 12 recite(s) the limitation(s) "the operating life", line(s) 1. There is insufficient antecedent basis for said limitation(s) in the claim(s).

Claim(s) 13 recite(s) the limitation(s) "an increasing amount of said feedstock", line(s) 8-9. Said claim(s) is/are indefinite as it is not clear what is the difference between said increasing amount of said feedstock and an increasing amount of said feedstock recited in line(s) 9 of claim 12. Suggested correction is to replace "an increasing amount of said feedstock" in line(s) 8-9 of claim(s) 13 with --the increasing amount of said feedstock--.

# Claim Rejections - 35 USC § 102

- 5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 6. Claim(s) 9-1/3 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Mackley (USP 3,469,950).

Regarding claim(s) 9, Mackley disclose(s) a similar method for operating a fixed bed reactor, comprising:

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and

- introducing said feedstock into said fixed bed of catalytic material, wherein a majority of said feedstock will flow through said top layer of said fixed bed of catalytic material (C1/31-C2/L73);

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- as said top layer of said fixed bed of catalytic material fouls, bypassing an increasing amount of said feedstock to said bottom layer of said fixed bed of catalytic material (C1/31-C2/L73).

Regarding claim(s) 10-11, Mackley disclose(s) the method for operating a fixed bed reactor, wherein:

- said feedstock is selected from the group consisting of liquid feed, vapor feed and mixtures thereof (C1/L32-40);
- said feedstock is selected form the group consisting of hydrocarbon feedstocks, chemical feedstocks, and mixtures thereof (C1/L32-40).

Regarding claim(s) 12, Mackley disclose(s) a similar method for extending the operating life of a fixed bed reactor, comprising:

- providing a reactor comprising a fixed bed (Fig. 4 and C1/31-C2/L73);
- partitioning said fixed bed into a top layer and a bottom layer (Fig. 4 and C1/31-C2/L73);
- introducing a feedstock into the fixed bed and as said top layer fouls bypassing an increasing amount of said feedstock to said bottom layer (C1/31-C2/L73).

Regarding claim(s) 13 Mackley disclose(s) a similar method for extending the operating life of a fixed bed reactor, wherein said bypassing step includes:

- positioning a bypass device in the fixed bed (Fig. 4), said bypass device comprising:
- a cage (10) positioned within said fixed bed (Fig. 4), said cage having a plurality of perforations (Fig. 3); and

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- a bypass tube (11) in fluid communication with said cage (10), said bypass tube (11) protruding from said cage above said fixed bed (fig. 4) for bypassing an increasing amount of said feedstock around said top layer of said fixed bed as it fouls through said bypass tube into said cage and out from said cage through said perforations into said bottom layer of said fixed bed (Fig. 4 and C1/31-C2/L73).

## Response to Arguments

- 7. Applicant's arguments filed 5 October 2001 have been fully considered but they are not persuasive.
- 8. The Applicant argues that Mackley does not disclose the limitation that as top layer of the fixed bed fouls an increasing amount of the feedstock is bypassed to bottom layer and, further, that Mackley device is not pressure drop driven or controlled.

In response the examiner would like to point out that during operation of the device disclosed in Mackley, as access to the top layer is becoming increasingly restricted by progressive fouling of the top layer, inherently, an increasing amount of feedstock will be directed to the bypass apparatus.

Further, it is noted that the features upon which applicant relies (i.e., device being pressure drop driven or controlled) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

#### Conclusion

- 9. In view of the foregoing, none of the claims are allowed.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Basia A Ridley, whose telephone number is (703) 305-

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5418. The examiner can normally be reached on Monday through Thursday, from 8:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode, can be reached on (703) 308-4311.

The fax phone number for Group 1700 is (703) 872-9311 (for Official papers after Final), (703) 872-9310 (for other Official papers) and (703) 305-6078 (for Unofficial papers). When filing a fax in Group 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Basia Ridley Examiner Art Unit 1764

BR February 28, 2002

MARIAN C. KNODE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700